



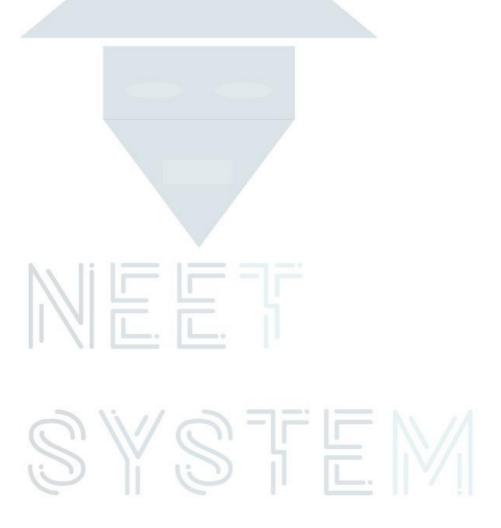
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Introduction

The NEET-SYSTEM In-service Training Programme and Handbook aim to enhance the skills of adult educators working directly with NEETs in order to be able to harness the potential of the innovative online educational escape room resources that will be developed as part of the project NEE-SYSTEM. As an end result they will be able to help NEET target group members to develop selected key competences that are highly valued in the European labour market and begin to reverse these aforementioned trends in each partner country.

The in-service training programme comprises of a total of 40 hours of learning broken down into 3 different phases as follows:

- Phase 1 a special 5 hour introductory workshop that will be held in each partner country as a preparation for the transnational training event;
- Phase 2 a 3 day, 20 hour training programme supporting adult educators to
 develop the necessary pedagogic skills and competences to deliver training in
 dynamic online environments and successfully manage the new student/tutor
 relationships that are a key part of successful learning partnerships; and training
 adult educators to develop their own online escape room challenge-based learning
 resources. This 20 hour face-to-face instruction will be delivered at the transnational
 training event in the UK in month 16.
- Phase 3 will comprise 15 hours of self-directed learning supported on-line through the e-learning portal.

The In-service training places a significant emphasis on online learning and explores the roles of educators in online interactive environments. In this regards, the NEE-SYSTEM escaperoom resources aim to bring a wide range of new environments into the learning process and through the training process it will be ensured that: tutors are comfortable working with the new resources in these non-traditional learning environments; fully bought-in to the benefits that online learning can bring for working with marginalised target groups; and aware of the risks that pertain when working in online environments.





Part 1 - Introductory Workshop

The Introductory workshop will be delivered in all partner countries with 2 participants. These participants will be the ones that will attend the training event in Lancaster, UK and will support afterwards the local training delivery to NEETs in each partner country. The purpose of the workshops will be informational and it will focus on preparing the participants for phase 2, the 3-day 20 hour training programme.

Preparation for the in-Service Training Event				
Aim	The aim of Part 1 is to introduce the philosophy and the basic concepts and terminology of the NEET-SYSTEM project to participants. A special emphasis will also be placed to the role of adult educator in training NEETs.			
Learning Outcomes				
Upon the completion	of the Learning Unit, p	articipants will be able	to:	
Knowledge	 Describe the basic aim and objectives of the NEET-SYSTEM 			
	project;			
	 Describe the 	characteristics and nee	eds of the NEET target	
	group;			
	 Underline th 	e project's importance	e to the NEET target	
	group;			
	 Discuss issue 	s related to the role	of adult educators to	
	NEET's educa	tion;		
	 Describe the 	basic elements of the	curriculum that will be	
	followed during the TTE;			
Skills	 Demonstrate willingness to participate to the TTE; 			
	 Exchange views about the content of the TTE; 			
	Communicate effectively with other participants during			
	the TTE.			
Competences	Participate a	ctively to the TTE;		
	 Work individ 	ually and in groups in	order to accomplish	
	learning tasks	5;		
	• Take respons	sibility for completing	all tasks allocated for	
	every activity	during the TTE.		
Activity Code	Activity Title	Activity Type	Learning Time for the Activity	
A1.1	Introduction of participants & Project Presentation	Face-to-face	1-2 hours	
Overview of the	Step 1: The instructor	welcomes participants	and conducts an Ice-	
content	Breaking Activity in order to get to know each other. (see			
	A1.1_ANNEX 1) – 20 min			
· · · · · · · · · · · · · · · · · · ·				





Step 2: Afterwards, the instructor presents information about the Erasmus+ programs in general and then more specifically about the NEET-SYSTEM project focusing on its philosophy, methodology and available tools and encourages discussion among participants. (see A1.1._ANNEX 2) –40 min

Content delivery methods (lecture, discussions, research, group work, etc.)

Ice-breaking activity

Discussion

Materials Required

Computer (Desktop/Laptop)

Projector

Speakers

Resources

PPT presentations (A.1.1_ANNEX 1, A1.1._ANNEX 2)

Assessment method

N/A

References

NEET-SYSTEM project website: https://neet-system.eu/ NEET-SYSTEM Project FB page: Neet-System Project /

https://www.facebook.com/pages/category/Community/NEET-System-Project-

257532031614821/

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
A1.2	The NEET target group: characteristics and needs	Face-to-face	2-3 hours
Overview of the content	Step 1: The instructor asks participants to brainstorm on the characteristics and needs of the NEET target group by writing the ideas on the flipchart. All participants are asked to provide the input40 min Step 2: Then, the instructor presents information about the common characteristics and needs across the EU. A speci emphasis is placed on the role of adult educators (methods are communication approaches that can be used in order to motivate NEET's and which barriers do they need to overcome in the learning process) (see A1.2_ANNEX 1) -20 min Step 3: Afterwards, the instructor shares the Learning Outcome Matrix with the participants. He/She gives participants some time to reflect on the learning outcomes of each competence and		group by writing their asked to provide their branches the EU. A special acators (methods and d in order to motivate ercome in the learning the Learning Outcomes articipants some time





encourages discussion among participants in order to answer questions. (see A1.2 ANNEX 2) -40 min

Step 4: Participants are asked to discuss about the competences and the learning outcomes and how they can be applicable to educational settings by reflecting on the content of the previous presentation. The instructor also prompts participants to ask questions and/ or express their thoughts and ideas. -20 min

Content delivery methods (lecture, discussions, research, group work, etc.)

Lecture

Discussion

Materials Required

Computer (Desktop/Laptop)

Projector

Flipchart

Markers

Resources

PPT presentation (A1.2_ANNEX 1)

Handouts: Learning Outcomes Matrix (A1.2 ANNEX 2)

Assessment method

N/A

- Event MD Studio Team (August 2, 2019). 61 Ice-Breakers for a more Engaged Event. Retrieved from: https://www.eventmanagerblog.com/ice-breakers
- European Commission (n.d.). What is Erasmus? Available at: https://ec.europa.eu/programmes/erasmus-plus/about en





Part 2 – In-service training programme

The In-Service Training Programme will be a 3-day, 20 hour training Programme supporting adult educators to develop the necessary pedagogic skills and competences to deliver training in dynamic online environments. The Programme will include different types of activities mostly suited to adult training techniques and teaching practices. Specifically, it will include hands-on activities that will support learners to engage in meaningful learning experiences and to better understand the potential of escape room resources and the benefits that online learning can bring for working with marginalised target groups. Also, it will allow adult educators to work autonomously and develop their own online escape room challenge-based learning resources. Lastly, the aforementioned event will prepare participants to work during Phase 3, where they will have to follow a 15-hour of self-directed learning which will be supported through the NEET-SYSTEM e-learning portal.

Learning Unit 1: Digital Escape Rooms in Education: Definitions, Characteristics & Use

Digital Escape Rooms In Education: Definitions, Characteristics & Use					
Aim	The aim of Learning Unit 1 is to provide general information on how games can be used in order to transform the teaching practice in educational settings.				
Learning Outcomes					
Upon the completion o	f the Learning Unit, participants will be able to:				
Knowledge	Describe the concept of a game;				
	 Distinguish between games and escape room games; 				
	 Recognize the value of games in educational settings in the digital era. 				
	List the benefits of gamification in teaching and learning.				
Skills	 Formulate ways in which games can be integrated in educational settings according to their subject matter; Plan a lesson that will integrate escape rooms games during instruction; Provide recommendations on the use of escape room games in educational settings. 				
Competences	 Be motivated to transform their teaching practices using new learning pathways (escape rooms games); Integrate escape room games in their instruction; Develop learning opportunities that will enhance teaching by applying gamification principles. 				





Activity Code	Activity Title	Activity Type	Learning Time for the Activity
A1.1	Introduction to the use of games in Education	Face-to-face	2 hours
Overview of the	Step 1: The instructor v	•	• •
content	an overview of the activ	vity and the learning o	objectives. – 10 min
	Step 2: The instructor conducts a brainstorming activity about		
	the concept of game ar	nd gamification. All pa	rticipants are asked
	to provide their input (see A1.1 ANNEX 1) – 4	40 min
	Step 3: Afterwards, the	instructor conducts a	a detailed
	presentation about the	concept of gamificat	ion and introduces
	its basic elements (see	A1.1 ANNEX 2) – 35 n	nin
	Step 4: Participants are	asked to discuss abo	ut gamification and
	how it can be applicable	e to educational setti	ngs by reflecting on
	the content of the prev	ious presentation. Th	e instructor also
	prompts participants to	ask questions and/ o	or express their
	thoughts and ideas. – 3	5 min	

Brainstorming

Lecture

Discussion

Materials Required

Flipchart

Markers

Computer (Desktop/Laptop)

Projector

Resources

PPT presentations (A1.1 ANNEX 1, A1.1 ANNEX 2)

Assessment method

Reflection Activity

- Clarke, S., Peel, D., Arnab, S., Morini, L., Keegan, H. & Wood, O. (2017). EscapED: A Framework for Creating Educational Escape Rooms and Interactive Games to For Higher/Further Education. *International Journal of Serious Games*, 4 (3), 73-86.
- Clarke, S., Arnab, S., Morini, L., Wood, O., Green, K., Masters, A., & Bourazeri, A. (2016, October). EscapED: A framework for creating live-action, interactive games for higher/further education learning and soft skills development. Available at: https://pureportal.coventry.ac.uk/files/11916604/escapedcomb.pdf
- Denning, T., Lerner, A., Shostack, A., & Kohno, T. (2013). Control-Alt-Hack: the design and evaluation of a card game for computer security awareness and education.
 Available at: https://tamaradenning.net/files/papers/ccs479-denning.pdf



- Edwards, K. (2009). Traditional games of a timeless land: Play cultures in Aboriginal and Torres Strait Islander communities. *Australian Aboriginal Studies*, (2), 32.
- Schell, J. (2008). The Art of Game Design: A book of lenses. Available at: http://www.aisacademics.com/wp-content/uploads/2017/07/GAD101-Introduction-to-Game-Development.pdf
- Prensky, M. (2001). Fun, Play and Games: What Makes Games Engaging Useful Resources. Available at:

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&u act=8&ved=2ahUKEwjVsc7zqLPhAhUHxoUKHRE3AvkQFjAAegQIBRAC&url=http%3A% 2F%2Fwww.marcprensky.com%2Fwriting%2FPrensky%2520-%2520Digital%2520Game-Based%2520Learning-Ch5.pdf&usg=AOvVaw03z1bVuxUfxRtafyplCnwe

• Tang, S. & Hanneghan, M. (2015). Designing Educational Games: A Pedagogical Approach, *IGI Global*, 181-198. doi: 10.4018/978-1-61520-781-7.ch008.

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
A1.2	Introduction to Escape Rooms	Face-to-face	2 hours
Overview of the content	Step 1: The instructor briefly presents an overview of the activity and the learning objectives. — 10 min Step 2: The instructor presents information about the Escape Rooms Games with a focus on their definitions and characteristics. He/She encourages discussion among participants in order to answer questions. (see A1.2 ANNEX 1) - 35 min Step 3: Then, the instructor implements an activity with cards for the benefits of using Escape Rooms in education (see A1.2 ANNEX 2_FlashcardsActivityInstructions, A1.2 ANNEX 2_Flashcards Board, A1.2 ANNEX_Flashcards) — 45 min Step 4: After the activity with the flashcards the instructor asks participants to take an online quiz and check their knowledge. —		about the Escape ns and on among see A1.2 ANNEX 1) — activity with cards for tion (see A1.2 2 ANNEX) — 45 min the instructor asks

Content delivery methods (lecture, discussions, research, group work, etc.)

Lecture

Discussion

Game with flashcards

Pens/pencils

Materials Required

Computer (Desktop/Laptop)

Projector

Handouts (Flashcards)

Pens/pencils





Internet Connection (Online Quiz)

Resources

Presentations (A1.2 ANNEX 1, A1.2 ANNEX 2_FlashcardsActivityInstructions,)
Pdf document with flashcards (A1.2 ANNEX 2_Flashcards Board, A1.2 ANNEX 2_Flashcards)

Assessment method

Online Quiz

(https://docs.google.com/forms/d/e/1FAIpQLSfctrLPLAQiEvtuQC_azpXCgGKxjz38ixVzISRxId0hqzBtBQ/viewform)

References

- López-Pernas, S., Gordillo, A., Barra, E., & Quemada, J. (2019). Examining the Use of an Educational Escape Room for Teaching Programming in a Higher Education Setting.

 Available at: https://ieeexplore.ieee.org/iel7/6287639/8600701/08658086.pdf
- Nicholson, S. (2016). Ask Why: Creating a Better Player Experience Through Environmental Storytelling and Consistency in Escape Room Design. Available at http://scottnicholson.com/pubs/askwhy.pdf
- Nicholson, S. (2015). *Peeking behind the locked door: A survey of escape room facilities*. Available at: http://scottnicholson.com/pubs/erfacwhite.pdf
- Wiemker, M., Elumir, E., & Clare, A. (2015). Escape room games: Can you transform an upleasant situation into a pleasant one?. Available at:
 <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiVurKYn7HhAhULNBQKHSraBOgQFjAAegQIBBAC&url=https%3A%2F%2Fthecodex.ca%2Fwp-content%2Fuploads%2F2016%2F08%2F00511Wiemker-etal-Paper-Escape-Room-Games.pdf&usg=AOvVaw3gJRMjw90mMO9gyZlsXaoq

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
A1.3	Gamification & Escape Rooms	Face-to-face	1.5 hours
Overview of the content	Step 1: The instructor briefly presents an overview of the activity and the learning objectives. – 10 min Step 2: The instructor conducts a World Café activity about gamification techniques in Escape Room Games. (see A1.3 ANNEX 1) – 55 min Step 3: Participants are asked to discuss about gamification and how it can be applicable to educational settings by reflecting on the findings from the world café activity. It also presents an example of the NEET-SYSTEM project resources. The instructor also prompts participants to ask questions and/ or express their thoughts and ideas 25 min		

Content delivery methods (lecture, discussions, research, group work, etc.)

Group work Discussion

Materials Required





Flipchart

Markers

Resources

PPT presentation (A1.3 ANNEX 1)

Assessment method

Reflection activity

- Nicholson, S. (2016). Ask Why: Creating a Better Player Experience Through Environmental Storytelling and Consistency in Escape Room Design. Available at http://scottnicholson.com/pubs/askwhy.pdf
- Nicholson, S. (2015). *Peeking behind the locked door: A survey of escape room facilities*. Available at: http://scottnicholson.com/pubs/erfacwhite.pdf
- Salen, K. & Zimmerman, E. (2004). Rules of Play: Game Design Fundamentals [Google Books version]. Retrieved from:
 <a href="https://books.google.com.cy/books?hl=en&lr=&id=UM-xyczrZuQC&oi=fnd&pg=PP13&dq=salen+zimmerman+meaningful+play&ots=2BHIAYeHZw&sig=HNtkW3XSfkKckGbmH_JePrDcYFU&redir_esc=y#v=onepage&q=salen%20zimmerman%20meaningful%20play&f=false
- Tang, S., Hanneghan, M., & El Rhalibi, A. (2009). Introduction to games-based learning. Available at: http://biblio.uabcs.mx/html/libros/pdf/9/c1.pdf
- Van Eck, R. (2006). Digital game-based learning: It's not just the digital natives who are restless. *EDUCAUSE review*, 41(2), 16.
- Wiemker, M., Elumir, E., & Clare, A. (2015). Escape room games: Can you transform an upleasant situation into a pleasant one?. Available at:
 <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiVurKYn7HhAhULNBQKHSraBOgQFjAAegQIBBAC&url=https%3A%2F%2Fthecodex.ca%2Fwp-content%2Fuploads%2F2016%2F08%2F00511Wiemker-et-al-Paper-Escape-Room-Games.pdf&usg=AOvVaw3gJRMjw90mMO9gyZlsXaoq





Learning Unit 2: Instructional Considerations for the Development of Digital Escape Rooms

Instructional Considerations for the Development of Digital Escape Rooms			
Aim	The aim of Learning Unit 2 is to provide information in regards to the creation, development and implementation of escape room games by placing an emphasis on narration techniques and instructional strategies. It also aims to provide information about the risks and possible negative factors associated with online learning.		
Learning Outcomes Upon the completion of	of the Learning Unit, parti	cipants will be able t	o:
Knowledge	 Describe the characteristics of engaging escape room narratives List the principles of game-based learning; Identify successful pedagogical approaches for the incorporation of escape room games in the teaching practice. Describe the risks pertaining the online environment; Safeguard against possible negative factors associated with online learning. 		
Skills	 Adapt a training session so that it introduces a gamified approach; Apply game-based learning principles to create their own escape room games; Transform their teaching practices by developing fun, challenging and creative digital games; Stimulate their classrooms' interest in the subject matter; Develop creative narratives to introduce a concept. 		
Competences	 Experiment during the design of the teaching practice in the development of escape room game narratives; Incorporate meaningful escape room challenges in everyday instruction; Solve instructional problems by applying gamification principles to simplify the subject matter; Establish engaging learning environments for their classrooms through the use of escape room games. 		
Activity Code	Activity Title	Activity Type	Learning Time for the Activity
B1.1	Escape Rooms Narratives	Face-to-face	1.5 hours





Overview of the content

Step 1: The instructor welcomes participants and briefly presents an overview of the activity and the learning objectives. – 10 min

Step 2: Firstly, the instructor implements an activity with Dos and Dont's flashcards in regards to Escape Room Narratives and asks participants to work in pairs. The instructor also prompts participants to ask questions and/ or express their thoughts and ideas. (see B1.1 ANNEX 1 Narrative

Dos&Donts_ActivityInstructions, B1.1 ANNEX 1_Narratives Dos&Donts_Flashcards, B1.1 ANNEX 1_Narratives Dos&Donts_Flashcard board) – 20 min

Step 3: Then, the instructor conducts a presentation about the narration techniques that can be applied to the development of Escape Room narratives. (see B1.1 ANNEX 2) - 15 min

Step 4: Participants are asked to discuss about the narration techniques by reflecting on the content of the previous presentation. They are also being presented an example of the NEET-SYSTEM project resources. – 15 min

Step 5: After the activity with the flashcards the instructor asks participants to take an online quiz and check their knowledge. – 30 min

Content delivery methods (lecture, discussions, research, group work, etc.)

Group work

Lecture

Discussion

Materials Required

Handouts

Pens/pencils

Computer

Projector

Internet Connection (Online Quiz)

Resources

Pdf Documents - Handout with the Dos and Don't's list (B1.1 ANNEX 1_Narratives Dos&Donts_Flashcards, B1.1 ANNEX 1_Narratives Dos&Donts_Flashcard board)
PPT Presentation (B1.1 ANNEX 2)

Assessment method

Online quiz

(https://docs.google.com/forms/d/e/1FAIpQLSdH2pA2ySvTk1qR58hspWaknhhp3ak7brQ5 RzEED2p1rHhfhg/viewform)

- Howard, J. (2008). Quests: Design, theory, and history in games and narratives.
 Available at: https://content.taylorfrancis.com/books/download?dac=C2010-0-47512-0&isbn=9781439880814&format=googlePreviewPdf
- Nicholson, S. (2016). Ask Why: Creating a Better Player Experience Through Environmental Storytelling and Consistency in Escape Room Design. Available at http://scottnicholson.com/pubs/askwhy.pdf





- Nicholson, S. (2015). *Peeking behind the locked door: A survey of escape room facilities*. Available at: http://scottnicholson.com/pubs/erfacwhite.pdf
- Schell, J. (2008). The Art of Game Design: A book of lenses. Available at: http://www.aisacademics.com/wp-content/uploads/2017/07/GAD101-Introduction-to-Game-Development.pdf
- Wiemker, M., Elumir, E., & Clare, A. (2015). Escape room games: Can you transform an upleasant situation into a pleasant one?. Available at:
 <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiVurKYn7HhAhULNBQKHSraBOgQFjAAegQIBBAC&url=https%3A%2F%2Fthecodex.ca%2Fwp-content%2Fuploads%2F2016%2F08%2F00511Wiemker-etal-Paper-Escape-Room-Games.pdf&usg=AOvVaw3gJRMjw90mMO9gyZlsXaoq

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
B1.2	Creating meaningful Escape Room challenges	Face-to-face	2 hours
Overview of the content	Step 1: The instructor briefly presents an overview of the activity and the learning objectives. – 10 min Step 2: The instructor shares handouts that include a Case Study about the creation of meaningful escape room challenges and asks participants to work in pairs on the handout exercises. The Case Study will be an example of the NEET-SYSTEM project resources. (see B1.2 ANNEX 1) – 50 min Step 3: Then, the instructor asks participants to share their results from working in pairs with the rest of the class. – 30 min Step 4: Participants are asked to discuss about the creation of meaningful escape room challenges by reflecting on the previous activity. – 30 min		nclude a Case Study m challenges and dout exercises. The /STEM project to share their the class. – 30 min at the creation of

Group work

Discussion

Materials Required

Handouts

Pens/Pencils

Resources

Word document - Handouts with the Case Study (B1.2 ANNEX 1)

Assessment method

Reflection activity

References

• López-Pernas, S., Gordillo, A., Barra, E., & Quemada, J. (2019). Examining the Use of an Educational Escape Room for Teaching Programming in a Higher Education Setting.

Available at: https://ieeexplore.ieee.org/iel7/6287639/8600701/08658086.pdf





Wiemker, M., Elumir, E., & Clare, A. (2015). Escape room games: Can you transform an upleasant situation into a pleasant one?. Available at:
 <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUKEwiVurKYn7HhAhULNBQKHSraBOgQFjAAegQIBBAC&url=https%3A%2F%2Fthecodex.ca%2Fwp-content%2Fuploads%2F2016%2F08%2F00511Wiemker-etal-Paper-Escape-Room-Games.pdf&usg=AOvVaw3gJRMjw90mMO9gyZlsXaoq

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
B1.3	Instructional Considerations for the design of Escape Room Games	Face-to-face	1,5 hours
Overview of the content	Step 1: The instructor briefly presents an overview of the activity and the learning objectives. – 10 min Step 2: The instructor shares handouts that include practical examples and exercises about the instructional considerations for the design of escape room games and asks participants to work in pairs. (see B1.3 ANNEX 1) – 40 min Step 3: Then, the instructor asks participants to share their results from working in pairs with the rest of the class. – 20 min Step 4: Participants are asked to discuss about the design of escape room games and how it can be applicable to educational settings by reflecting on the content of the previous exercises. The instructor also prompts participants to ask questions and/ or express their thoughts and ideas. – 20 min		

Content delivery methods (lecture, discussions, research, group work, etc.)

Group work

Materials Required

Handouts

Pens/Pencils

Resources

Word document with practical examples and exercises (B1.3 ANNEX 1)

Assessment method

Reflection activity

- Clarke, S., Peel, D., Arnab, S., Morini, L., Keegan, H. & Wood, O. (2017). EscapED: A Framework for Creating Educational Escape Rooms and Interactive Games to For Higher/Further Education. *International Journal of Serious Games*, 4 (3), 73-86.
- Nicholson, S. (2016). Ask Why: Creating a Better Player Experience Through Environmental Storytelling and Consistency in Escape Room Design. Available at http://scottnicholson.com/pubs/askwhy.pdf





- Tang, S. & Hanneghan, M. (2015). Designing Educational Games: A Pedagogical Approach, *IGI Global*, 181-198. doi: 10.4018/978-1-61520-781-7.ch008.
- Van Eck, R. (2006). Digital game-based learning: It's not just the digital natives who are restless. *EDUCAUSE review*, 41(2), 16.

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
B1.4	Risks and possible negative factors associated with online learning	Face-to-face	1.5 hour
Overview of the	Step 1: The instructor brie	fly presents an overview	of the activity
content	and the learning objectives. – 10 min		
	Step 2: The instructor asks participants to brainstorm on the risks and		
	and possible negative factors associated with online learning by		
	writing their ideas on th	e flipchart. All participa	ants are asked to
	provide their input. – 30 m	nin	
	Step 3: Then, the instructor conducts a presentation about the risks and possible negative factors associated with online learning. The instructor also prompts participants to ask questions and/or express their thoughts and ideas. (see ANNEX B1.4 ppt) – 20 min Step 4: After the activity with the flashcards the instructor asks participants to take an Online safety in digital world exercise. – 30 min (see ANNEX)		

Brainstorming

Lecture

Discussion

Materials Required

Flipchart

Computer

Projector

Markets

Internet Connection (Online Quiz)

Resources

PPT presentation (see ANNEX)

Assessment method

Online safety in digital world exercise (see ANNEX)

References

Riva G., Wiederhold B.K. & Cipresso P. (2015). The Psychology of Social Networking Vol.1, Personal Experience in Online Communities. Walter de Gruyter GmbH & Co KG Place. Retrieved from:

https://play.google.com/store/books/details/The Psychology of Social Networking Vol 1 Personal?id=8UcnDgAAQBAJ





WPS Marketing (2017). A Guide to Effective Communication in Today's Digital World. Retrieved December 19th, 2019 from https://blog.wps.com/a-guide-to-effective-communication-in-todays-digital-world

Online safety. NSPCC. (2019) Retrieved December 19th, 2019 from https://www.nspcc.org.uk/keeping-children-safe/online-safety/

Simmonds, R. (2019) What Every Young Professional Should Know About Social Media. Retrieved December 19th, 2019 from https://rosssimmonds.com/young-professional-social-media/

Maryville University (2019). Ultimate Guide to Professional Communication for Young Adults in the Digital Age. Retrieved December 19th, 2019 from https://online.maryville.edu/online-bachelors-degrees/communications/guide-to-professional-communication-for-young-adults/

eSafety Commissioner. Your digital reputation. Retrieved December 19th, 2019 from https://www.esafety.gov.au/young-people/your-digital-reputation

Applied educational systems. What Is Digital Citizenship (& How Do You Teach It)? Retrieved December 19th, 2019 from https://www.aeseducation.com/career-readiness/what-is-digital-citizenship

How To be Professional on Social Media! (2016) https://www.youtube.com/watch?v=VynmGy6GLEs





Learning Unit 3: Know-how and Technical Considerations for the development of Digital Escape Rooms

Know-how and Techn	ical Considerations for	the developme	nt of Digital
Escape Rooms	I		
Aim	The aim of Learning Unit 3 is to provide information in regards to the methodology and technical development of the digital escape room games.		
Learning Outcomes Upon the completion of the	he Learning Unit, participa	ants will be able to	:
Knowledge	 Describe the process of developing a digital escape room using Google Forms Software; Identify the basic functions of the Google Forms Software and how they can be applied during the development of digital escape room games; List the benefits of using the Google Forms Software for developing digital escape room games. 		
Skills	 Apply different set of questions to create digital escape room games; Create multimedia representations of the subject matter content in the form of digital escape room games; Provide feedback depending on the students' responses; Share online the digital escape room games with colleagues and/or students. 		
Competences	 Create digital escape room games for their classrooms that will include at least 3 challenges; Align digital escape room games with the subject matter content; Measure student's achievement through the digital escape room games. 		
Activity Code	Activity Title	Activity Type	Learning Time for the Activity
C1.1	The methodology for creating Digital Escape Room Games The methodology for 1 hour		
Overview of the content	Step 1: The trainer welcomes participants and briefly presents an overview of the activity and the learning objectives. – 10 min Step 2: Trainer is presenting one example of escape room developed in NETT SYSTEM project – 30 min Step 3: Then, the instructor asks participants to share their experiences and questions regarding escape rooms development. – 10 min		





Step 4: Participants are asked to discuss about the methodology escape room challenges by reflecting on the previous exercises and presentation. – 10 min

Content delivery methods (lecture, discussions, research, group work, etc.)

Group work

Lecture

Discussion

Materials Required

Computer (Desktop/Laptop)

Projector

Handouts

Pens/pencils

Resources

NEET SYSTEM Handbook

Assessment method

Reflection activity

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
C1.2	User Guide to Google Forms	Face-to-face	2 hours
Overview of the content	Step 1: The trainer briefly presents an overview of the activity and the learning objectives. – 10 min Step 2: The trainer is following Handbook instructions in section "Brief User Guide to Google Forms" and present step by step how to create and edit google forms. Trainees following the process on their computers 90 min Step 3: Presentation of created forms and quizzes – 20 min Step 4: Discussion and problem solving. – 10 min		

Content delivery methods (lecture, discussions, research, group work, etc.)

Demonstration

Materials Required

Computer (Desktop/Laptop)

Projector

Internet Access

Gmail Account

Resources

NEET SYSTEM Handbook

Assessment method

Product development (Escape Rooms Game)





Activity Code	Activity Title	Activity Type	Learning Time for the Activity
C1.3	Develop my own Digital Escape Room Game	Face-to-face	4.5 hours
Overview of the content			

Group work

Discussion

Materials Required

Computer (Desktop/Laptop)

Projector

Internet Access

Gmail Account

Resources

NEET SYSTEM Handbook

Assessment method

Product development (Digital Escape Room Game)

- Heikkinen, O., & Shumeyko, J. (2016). *Designing an escape room with the experience pyramid model*. Available at: https://core.ac.uk/download/pdf/45600683.pdf
- López-Pernas, S., Gordillo, A., Barra, E., & Quemada, J. (2019). Examining the Use of an Educational Escape Room for Teaching Programming in a Higher Education Setting. Available at: https://ieeexplore.ieee.org/iel7/6287639/8600701/08658086.pdf
- Nicholson, S. (2016). Ask Why: Creating a Better Player Experience Through Environmental Storytelling and Consistency in Escape Room Design. Available at http://scottnicholson.com/pubs/askwhy.pdf
- Nicholson, S. (2015). *Peeking behind the locked door: A survey of escape room facilities*. Available at: http://scottnicholson.com/pubs/erfacwhite.pdf
- Selinker, M., & Snyder, T. (2013). *Puzzle Craft: The Ultimate Guide on how to Construct Every Kind of Puzzle*. Puzzlewright Press.
- Tang, S. & Hanneghan, M. (2015). Designing Educational Games: A Pedagogical Approach, *IGI Global*, 181-198. doi: 10.4018/978-1-61520-781-7.ch008.





- Google Support (n.d.). How to use Google Forms. Retrieved from: https://support.google.com/docs/answer/6281888?co=GENIE.Platform%3DDesktop&hl=en
- Porter, D. (2016, July 28th). *Google Forms Full Tutorial From Start To Finish How To Use Google Forms* [Video file]. Retrieved from: https://www.youtube.com/watch?v=LxlfPLPIOwM





Part 3 – Self-directed online learning

During this part of the training all participants will have to study the In-Service Training resources and apply what they have learned during an instructional task. The instructional task will include the selection of a competence area of their interest and the application of instructional and technical skills in order to develop at least 2 Escape Room Challenges by completing a 15-hour work based on the Learning Outcomes Matrix of the NEET-SYSTEM project. Specifically, their tasks will include:

Design, Creation and Development of Escape Rooms Challenges					
Aim	The aim of Part 3 is to allow participants to study the In-Service Training resources so to be able to build competences and finally develop their own digital escape rooms during self-paced learning.				
Learning Outcomes	<u>'</u>				
	he Learning Unit, particip				
Knowledge	 Define the concept of a digital escape room game; Describe the methodologies, strategies and instructional approaches in regards to the development of digital escape room games; List some successful narration techniques for creating digital escape room games; List some principles of game-based learning. 				
Skills	 Apply principles of game-based learning to create digital escape room games; Use the Google Forms Software in order to develop digital escape room games that include different types of questions and exercises; Incorporate multimedia representations to their digital escape room games in order to enhance the understanding of a concept; Share the digital escape room games. 				
Competences	 Develop fun, challenging and creative digital escape room games for four levels: Introductory, Intermediate, Advanced and Expert depending on the level of competence that is to be addressed. 				
Activity Code	Activity Title	Activity Type	Learning Time for the Activity		
3.1	Design, Creation and Development of Escape Rooms Resources for the Introductory Level (Optional)	Online	3-6 hours (including self- directed learning, design & development)		





Overview of the content	The Escape Room Challenge for the Introductory Level that wi be produced will include:			
	 the learning outcomes to be achieved an Introductory Narration a Challenge in media rich format, e.g. pics, gifs etc. 			
	 a Congratulations message based on the narrative 			

Online Learning

Self-paced learning

Materials Required

Computer (Desktop/Laptop)

Internet Access

Gmail Account

Resources

NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room Games in Educational Settings

Assessment method

Product development (Digital Escape Room Game)

References

NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room Games in Educational Settings

Activity Code	Activity Title	Activity Type	Learning Time for the Activity	
3.2	Design, Creation and Development of Escape Rooms Resources for the Intermediate Level (Optional)	Online	4-8 hours (including self- directed learning, design & development)	
Overview of the content	The Escape Room Challenge for the Intermediate Level that will be produced will include: • the learning outcomes to be achieved • an Introductory Narration • a Challenge in media rich format, e.g. pics, gifs etc. • a Congratulations message based on the narrative			
Content delivery method	s (lecture, discussions, res	earch, group work	, etc.)	
Online Learning Self-paced learning				
Materials Required				
Computer (Desktop/Laptop)				
Internet Access				
Gmail Account				
Resources				





NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room Games in Educational Settings

Assessment method

Product development (Digital Escape Room Game)

References

NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room Games in Educational Settings

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
3.3	Design, Creation and Development of Escape Rooms Resources for the Advanced Level (Optional)	Online	4-8 hours (including self- directed learning, design & development)
Overview of the content	The Escape Room Challenge for the Advanced Level that will be produced will include: • the learning outcomes to be achieved • an Introductory Narration • a Challenge in media rich format, e.g. pics, gifs etc. • a Congratulations message based on the narrative		

Content delivery methods (lecture, discussions, research, group work, etc.)

Online Learning

Self-paced learning

Materials Required

Computer (Desktop/Laptop)

Internet Access

Gmail Account

Resources

NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room Games in Educational Settings

Assessment method

Product development (Digital Escape Room Game)

References

NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room Games in Educational Settings

Activity Code	Activity Title	Activity Type	Learning Time for the Activity
3.2	Design, Creation and Development of Escape Rooms Resources for	Online	4-8 hours (including self- directed learning, design & development)

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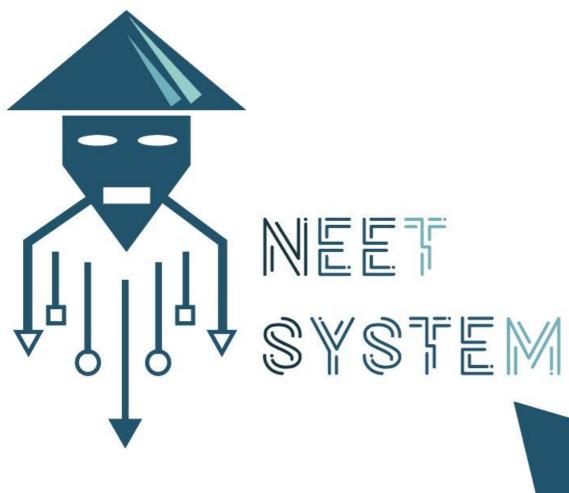




	the Expert Level		
	(Optional)		
Overview of the	The Escape Boom Challer	ago for the Evport I	oval that will be
content	The Escape Room Challer produced will include:	ige for the expert t	ever that will be
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	an Introductory N		
	 a Challenge in me 	dia rich format, e.g	. pics, gifs etc.
	 a Congratulations 	message based on	the narrative
Content delivery method	s (lecture, discussions, res	earch, group work	, etc.)
Online Learning			
Self-paced learning			
Materials Required			
Computer (Desktop/Lapto	op)		
Internet Access			
Gmail Account			
Resources			
NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room			
Games in Educational Settings			
Assessment method			
Product development (Digital Escape Room Game)			
References			
NEET-SYSTEM Handbook for Training Professionals to the Use of Digital Escape Room			
Games in Educational Settings			

All participants will have to submit their work to the partnership in order to get their certificates. A deadline for this task will be set after the end of the training event which will be held in the UK.





























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